10 CSR 10-5.290 More Restrictive Emission Limitations for Sulfur Dioxide and Particulate Matter in the South St. Louis Area

- (1) Applicability. Except as otherwise provided, this rule shall apply to all sources in an area bounded as follows: Beginning at St. Louis County on the west bank of the Mississippi River approximately thirty five hundred (3500) feet south of the confluence of the River des Peres and the Mississippi River at the intersection of an extension of Rippa Street and the bank of the Mississippi River, west along Rippa Street to Broadway, north on Broadway to Vincent, west on Vincent to Gentry, northeast on Gentry to Orient, northwest on Orient to Lemay Ferry Road, northeast on Lemay Ferry Road to Bayless Avenue, northwest on Bayless Avenue to Interstate 55, northeasterly on Interstate 55 crossing the boundary between the City and County of St. Louis to Loughborough, then easterly on Loughborough to the west bank of the Mississippi River to the point of beginning all lying within St. Louis City and St. Louis County.
- (2) Restrictions Applicable to All Installations.
 - (A) Restriction of Emissions of Fugitive Dust.
- 1. No person may cause or permit the handling or transporting or storage of any material in a manner which allows particulate matter to become airborne in such quantities and concentrations that 1) it remains visible in the ambient air beyond the premises where it originates, or 2) that its presence may be found beyond the premises where it originates and is larger than forty (40) microns in size. The size of the particulate matter shall be determined by microscopy or any other technique proven to be equally accurate;
- 2. No person may cause or permit a building or its appurtenances, or a road, or a driveway, or a parking lot, or an open area to be constructed, used, repaired or demolished without applying all such reasonable measures as may be required to prevent particulate matter from becoming airborne. The director, Department of Natural Resources, may require a person owning, operating or otherwise in control of the building, appurtenance, road, driveway, parking lot, or open area to take such reasonable measures as may be necessary to prevent particulate matter from becoming airborne including, but not limited to, paving or frequent cleaning of roads, driveways, and parking lots; application of dust-free surfaces; application of water; and the planting and maintenance of vegetative ground cover or buffer zones.

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- 3. No person may emit into the ambient air from any air contaminant source fugitive emissions greater than that which would be emitted after application of all reasonably available control technologies and all reasonable maintenance of plant and equipment.
- (3) Restrictions Applicable to the Byproduct Coke Ovens at 526 East Catalan Street owned and operated by Carondelet Coke Corporation or its successors and assigns.
 - (A) Restriction of emissions of particulate matter.
- 1. The owner or operator shall purchase and install a new larry car on the coke oven batteries which shall comply with the requirements listed in 29 CFR Section 1910.1029 (41 Fed Reg 46784 October 22, 1976).
 - A. The larry car should be delivered by January 1, 1980;
 - B. The larry car shall be erected by March 1, 1980; and
- C. Testing and shakedown of the larry car shall be completed by June 1, 1980.
- D. After June 1, 1980, no visible emissions shall occur during charging, except for a period of 120 seconds aggregated over six (6) consecutive charges.
- 2. The owner or operator shall purchase and install a new level bar boot which shall be designed and installed in compliance with the requirements listed in 29 CFR section 1910.1029 (41 Fed Reg 46784 October 22, 1976).
 - A. Equipment was purchased by January 11, 1978.
 - B. Equipment shall be delivered by December 1, 1978; and
 - C. Equipment shall be installed by May 1, 1979.
- 3. The owner or operator shall control the coke pushing operation by modification of the existing hoods so they shall collect at least ninety percent (90%) of the particulate matter generated during the pushing operation.
- A. The hood fabrication shall be completed by March 1, 1978; and

- B. Hood modifications shall be completed by June 1, 1978.
- 4. The owner or operator shall control the emissions from the hood on the coke pushing operations by installation of an air pollution control device for the emissions collected from the hoods. The particulate matter emissions from the air pollution control device shall be limited to .004 grains per standard dry cubic foot during the pushing cycle and .002 grains per standard dry cubic foot during the nonpushing cycle.
- A. Engineering of the air pollution control device shall be completed by March 1, 1979;
 - B. Equipment shall be delivered by September 1, 1979;
 - C. Equipment shall be constructed by January 1, 1980;
- D. Testing shall be completed and final compliance with this rule by April 1, 1980.
- 5. The owner or operator shall control the visible emissions from the coke ovens to:
- A. After November 1, 1978 no more than two percent (2%) of the operating charging hole lids having any visible emissions;
- B. After November 1, 1978 no more than ten percent (10%) of the operating offtakes having any visible emissions;
- C. After November 1, 1978 no more than fifteen percent (15%) of the operating pusher side coke oven doors having visible emissions; and
- D. After June 1, 1980 the opacity from the battery stacks not exceeding twenty percent (20%).
- (4) Restrictions Applicable to the titanium pigment plant located at River des Peres and Mississippi River owned and operated by N.L. Industries, Inc. or its successors and assigns.
 - (A) Restriction of emissions of sulfur dioxide
- 1. Emissions from indirect heating sources shall be limited to 1.8 pounds sulfur dioxide per million BTU actual heat input.
 - 2. Emissions from calciners and ore digestors shall be

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limited to one hundred (100) ppm sulfur dioxide.

- 3. Emissions from sulfuric acid plants shall be limited to five hundred (500) ppm sulfur dioxide.
 - (B) Restriction of emissions of particulate matter
- 1. Emissions from indirect heating sources shall be limited to 0.16 pounds particulate emission per million BTU actual heat input.
- 2. Emissions from all other sources except the calciners shall be limited to 0.02 gains per standard dry cubic foot.
- 3. Emissions from the calciners shall be limited to the provisions of rule 10 CSR 10-5.050, paragraph (2)(A)1.
 - (C) Restrictions of emission of visible air contaminants
- 1. Emissions from the sulfuric acid plants shall not exceed ten percent (10%) opacity at any time.
- 2. Emissions from all other sources shall not exceed twenty percent (20%) opacity at any time, except as provided in paragraph (4)(D)1.
 - (D) Exceptions
- 1. Sources subject to paragraph (4)(C)2. may discharge into the atmosphere from any single source of emission for a period or periods aggregating not more than six (6) minutes in any sixty (60) minutes, air contaminants of a shade or density not greater than forty percent (40%) opacity.
- 2. Where the presence of uncombined water is the only reason for failure of an emission to meet the requirements of paragraphs (4)(C)1. or 2. of this rule, such sections shall not apply.
 - (E) Compliance schedule
- 1. All sources subject to subsection (4)(A) and paragraph (4)(B)3. shall be in compliance upon the effective date of this rule.
- 2. All sources subject to paragraphs (4)(B)1. or 2. not in compliance at the effective date of this rule shall purchase and

install the necessary air pollution control devices to comply with the rule no later than October 1, 1980, on the following schedule:

- A. Engineering plans for the air pollution control device shall be submitted by August 1, 1978;
- B. Air pollution control equipment shall be purchased by October 1, 1978;
- C. Air pollution control equipment shall be delivered by April 1, 1980;
 - D. Equipment shall be constructed by August 1, 1980; and
- E. Testing shall be completed and final compliance with this rule by October 1, 1980.

(5) Method of Measurements

- (A) The concentrations of particulate in stack gases shall be determined as specified in 10 CSR 10-6.030, section (5), except as provided in subsection (E) of this section.
- (B) The concentration of sulfur dioxide emissions from air contaminant sources shall be determined as specified in 10 CSR 10-6.030, section (6).
- (C) The visible emissions from air contaminant sources shall be evaluated as specified in 10 CSR 10-6.030, section (9), except as provided in subsections (G), (H), (I), and (J) of this section.
- (D) The efficiency of the collection hood as specified in paragraph (3)(A)3. shall be determined as specified in 10 CSR 10-6.030, section (13).
- (E) The concentration of particulate matter in stack gases as specified in paragraph (3)(A)4. of this rule shall be determined as specified in 10 CSR 10-6.030, section (14).
- (F) Compliance with subparagraph (3)(A)1.D. of this rule shall be determined as specified in 10 CSR 10-6.030, section (15).
- (G) Compliance with subparagraph (3)(A)5.A. of this rule shall be determined as specified in 10 CSR 10-6.030, section

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(17).

- (H) Compliance with subparagraph (3)(A)5.B. of this rule shall be determined as specified in 10 CSR 10-6.030, section (16).
- (I) Compliance with subparagraph (3)(A)5.C. of this rule shall be determined as specified in 10 CSR 10-6.030, section (18).

EPA Rulemakings

CFR: 40 C.F.R. 52.1320(c)(38)

FRM: 47 FR 38123 (8/30/82)
PRM: 47 FR 10058 (3/9/82)

State Submission: 7/5/82

State Proposal: 6 MR 1415 (12/1/81)
State Final: 7 MR 767 (5/3/82)

APDB File: MO-32

Description: The EPA approved an amendment to the rule which provided for changes in

ownership and operating responsibilities of the affected sources.

CFR: 40 C.F.R. 52.1320(c)(16)(vii)

FRM: 45 FR 24140 (4/9/80) and 45 FR 46806 (7/11/80) (correction)

PRM: 44 FR 61384 (10/25/79)
State Submission: 6/29/79

State Proposal: 3 MR 157 (4/3/78)
State Final: 3 MR 984 (12/1/78)

APDB File: MO-01

Description: The EPA approved a new regulation to control particulate matter and SO_2 in

conjunction with approval of the Part D SIP for the St. Louis "Hot Spot."

Difference Between the State and EPA-Approved Regulation

The state has deleted all provisions to N.L. Industries, which is no longer in operation, and has made significant changes to the provisions affecting Carondelet Coke. (See file MO-44.)